

# Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



U S C E N S U S B U R E A U

*Helping You Make Informed Decisions*

U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU



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-- Not applicable for this report.

**Table 1. Historical Statistics for the Industry: 2002 and Earlier Years**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
336419, Other guided missile and space vehicle parts and auxiliary equipment manufacturing .....											
2002..	52	54	6 232	321 012	2 934	6 017	111 151	684 711	306 040	963 824	17 969
2001..	N	N	5 512	277 665	2 973	6 150	114 915	476 907	323 967	796 121	20 524
2000..	N	N	6 044	302 118	4 666	9 188	211 748	504 443	316 385	839 735	10 517
1999..	N	N	6 068	288 265	4 769	9 637	213 031	577 428	320 169	903 811	15 814
1998..	N	N	6 755	303 339	4 627	9 388	194 624	613 225	458 305	1 086 089	39 028
1997..	48	50	6 437	291 438	4 351	8 943	187 110	575 822	395 258	963 405	28 795

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. **Industry Statistics for Selected States: 2002**

[Not applicable for this report]

**Table 3. Detailed Statistics by Industry: 2002**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
<b>336419, Other guided missile and space vehicle parts and auxiliary equipment manufacturing</b>	
Companies <sup>1</sup> .....	52
All establishments <sup>2</sup> .....	54
Establishments with 1 to 19 employees .....	27
Establishments with 20 to 99 employees .....	11
Establishments with 100 employees or more .....	16
All employees <sup>3</sup> .....	6 232
Total compensation .....	415 783
Annual payroll .....	321 012
Total fringe benefits .....	94 771
Production workers, average for year .....	2 934
Production workers on March 12 .....	2 999
Production workers on May 12 .....	2 979
Production workers on August 12 .....	2 903
Production workers on November 12 .....	2 842
Production worker hours .....	6 017
Production worker wages .....	111 151
Total cost of materials .....	306 040
Materials, parts, containers, packaging, etc., used .....	240 332
Resales .....	251
Purchased fuels .....	5 225
Purchased electricity .....	16 367
Contract work .....	43 865
Quantity of electricity purchased for heat and power .....	311 274
Quantity of electricity generated less sold for heat and power .....	—
Total value of shipments .....	963 824
Primary products value of shipments .....	769 357
Secondary products value of shipments .....	D
Total miscellaneous receipts .....	D
Value of resales .....	314
Contract receipts .....	D
Other miscellaneous receipts .....	D
Primary products specialization ratio .....	83
Value of primary products shipments made in all industries .....	2 858 856
Value of primary products shipments made in this industry .....	769 357
Value of primary products shipments made in other industries .....	2 089 499
Coverage ratio .....	27
Value added .....	684 711
Total inventories, beginning of year .....	80 868
Finished goods inventories .....	13 310
Work-in-process inventories .....	54 613
Materials and supplies inventories .....	12 945
Total inventories, end of year .....	111 050
Finished goods inventories .....	10 255
Work-in-process inventories .....	84 595
Materials and supplies inventories .....	16 200
Gross value of depreciable assets (acquisition costs) at beginning of year .....	286 380
Total capital expenditures (new and used) .....	17 969
Buildings and other structures (new and used) .....	5 019
Machinery and equipment (new and used) .....	12 950
Automobiles, trucks, etc., for highway use .....	496
Computers and peripheral data processing equipment .....	1 139
All other expenditures for machinery and equipment .....	11 315
Total retirements .....	5 803
Gross value of depreciable assets at end of year .....	298 546
Depreciation charges during year .....	57 458
Total rental payments .....	14 856
Buildings and other structures .....	5 588
Machinery and equipment .....	9 268
Total other expenses <sup>4</sup> .....	35 663
Response coverage ratio <sup>5</sup> .....	77
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	1 399
Communications services <sup>4</sup> .....	1 181
Legal services <sup>4</sup> .....	1 633
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	481
Advertising and promotional services <sup>4</sup> .....	1 551
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	D
Refuse removal (including hazardous waste) services <sup>4</sup> .....	1 285
Management consulting and administrative services <sup>4</sup> .....	D
Taxes and license fees <sup>4</sup> .....	1 427
All other expenses <sup>4</sup> .....	20 241

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
336419, Other guided missile and space vehicle parts and auxiliary equipment manufacturing											
All establishments .....	1	54	6 232	321 012	2 934	6 017	111 151	684 711	306 040	963 824	'17 969
Establishments with—											
1 to 4 employees .....	9	14	30	1 328	25	44	1 054	1 978	1 258	3 236	'71
5 to 9 employees .....	7	5	35	1 524	22	42	1 180	2 414	1 295	3 706	'178
10 to 19 employees .....	6	8	116	5 608	97	171	4 561	9 039	4 551	13 475	'267
20 to 49 employees .....	—	5	c	D	D	D	D	D	D	D	'302
50 to 99 employees .....	5	6	474	22 864	296	551	13 093	52 740	23 334	75 757	'1 291
100 to 249 employees .....	1	13	2 163	91 992	1 241	2 623	40 941	218 504	140 643	361 764	'8 737
250 to 499 employees .....	—	1	e	D	D	D	D	D	D	D	D
500 to 999 employees .....	—	1	f	D	D	D	D	D	D	D	D
1,000 to 2,499 employees .....	—	1	g	D	D	D	D	D	D	D	D
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	19	78	3 962	65	123	3 242	6 024	3 634	9 658	'220

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
336419	Other guided missile and space vehicle parts and auxiliary equipment manufacturing .....	54	6 232	321 012	2 934	6 017	111 151	684 711	306 040	963 824	'17 969
3364191	Missile and space vehicle components, parts, and subassemblies .....	22	5 414	288 739	2 337	4 824	89 586	619 769	263 338	854 593	'15 334
3364193	Research and development on missile and space vehicle parts and components .....	5	437	12 872	274	582	5 651	33 621	20 610	56 099	'1 623

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 6a. Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
336419	Other guided missile and space vehicle parts and auxiliary equipment manufacturing .....	2002..	N	X	2 858 856
		1997..	N	X	2 874 097
3364191	Missile and space vehicle components, parts, and subassemblies .....	2002..	N	X	2 601 881
		1997..	N	X	2 524 432
33641911	Missile and space vehicle airframes and space capsules for U.S. Government military customers .....	2002..	N	X	D
		1997..	N	X	266 391
3364191101	Missile and space vehicle airframes for U.S. Government military customers .....	2002..	5	X	D
		1997..	8	X	D
3364191104	Missile and space capsules for U.S. Government military customers .....	2002..	1	X	D
		1997..	3	X	D
33641912	All other missile and space vehicle components, parts, and subassemblies for U.S. Government military customers .....	2002..	N	X	1 333 458
		1997..	N	X	764 987
3364191207	All other missile and space vehicle components, parts, and subassemblies for U.S. Government military customers .....	2002..	21	X	1 333 458
		1997..	32	X	764 987
33641913	Missile and space vehicle components, parts, and subassemblies for U.S. Government nonmilitary customers .....	2002..	N	X	D
		1997..	N	X	1 228 555
3364191311	Missile and space vehicle components, parts, and subassemblies for U.S. Government nonmilitary customers .....	2002..	8	X	D
		1997..	15	X	1 228 555
33641914	Missile and space vehicle components, parts, and subassemblies for other customers .....	2002..	N	X	218 828
		1997..	N	X	246 802
3364191413	Missile and space vehicle components, parts, and subassemblies for other customers .....	2002..	16	X	218 828
		1997..	17	X	246 802
3364191Y	Missile and space vehicle components, parts, and subassemblies, nsk .....	2002..	N	X	278 705
		1997..	N	X	17 697
3364191YV	Missile and space vehicle components, parts, and subassemblies, nsk .....	2002..	N	X	278 705
		1997..	N	X	17 697
3364193	Research and development on missile and space vehicle parts and components .....	2002..	N	X	205 509
		1997..	N	X	329 406
33641931	Research and development on missile and space vehicle parts and components .....	2002..	N	X	204 160
		1997..	N	X	328 305
3364193101	Research and development on missile and space vehicle airframes and space capsules for U.S. Government military customers .....	2002..	4	X	7 587
		1997..	4	X	D
3364193104	Other research and development on missile and space vehicle parts and components for U.S. Government military customers .....	2002..	7	X	110 647
		1997..	8	X	D
3364193107	Research and development on missile and space vehicle parts and components for U.S. Government nonmilitary customers .....	2002..	3	X	D
		1997..	7	X	D
3364193111	Research and development on missile and space vehicle parts and components for other customers .....	2002..	5	X	D
		1997..	6	X	D
3364193Y	Research and development on missile and space vehicle parts and components, nsk .....	2002..	N	X	1 349
		1997..	N	X	1 101
3364193YV	Research and development on missile and space vehicle parts and components, nsk .....	2002..	N	X	1 349
		1997..	N	X	1 101
336419W	Other guided missile and space vehicle parts and auxiliary equipment manufacturing, nsk, total .....	2002..	N	X	51 466
		1997..	N	X	20 259
336419WY	Other guided missile and space vehicle parts and auxiliary equipment manufacturing, nsk, total .....	2002..	N	X	51 466
		1997..	N	X	20 259
336419WYWW	Other guided missile and space vehicle parts and auxiliary equipment manufacturing, nsk, for nonadministrative-record establishments .....	2002..	N	X	41 808
		1997..	N	X	6 726
336419WYWY	Other guided missile and space vehicle parts and auxiliary equipment manufacturing, nsk, for administrative-record establishments .....	2002..	N	X	9 658
		1997..	N	X	13 533

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
336419	Other guided missile and space vehicle parts and auxiliary equipment manufacturing		
00900001	Total materials .....2002..	X	240 332
	.....1997..	X	287 814
33641900	Guided missile and space vehicle airframe parts .....2002..	X	D
	.....1997..	X	D
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components .....2002..	X	D
	.....1997..	X	D
00190070	Resin matrix composites .....2002..	X	D
	.....1997..	X	D
00190071	Other matrix composites (including ceramic, carbon, metal, etc.) .....2002..	X	D
	.....1997..	X	D
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	341
	.....1997..	X	1 164
33211101	Iron and steel forgings .....2002..	X	D
	.....1997..	X	1 579
33211201	Nonferrous forgings .....2002..	X	D
	.....1997..	X	D
33151001	Iron and steel castings (rough and semifinished) .....2002..	X	D
	.....1997..	X	D
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....2002..	X	D
	.....1997..	X	D
33100033	Metal shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	X	D
32500045	Chemicals, all types (including propellants) .....2002..	X	112
	.....1997..	X	D
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	106 522
	.....1997..	X	111 710
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	95 193
	.....1997..	X	34 194

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.